



Globe Valves Type Bolted Bonnet

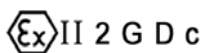
Class 600 DN 50-300 (2" – 12")

Carbon, Alloy and Stainless Steel



Fig. VG600BB

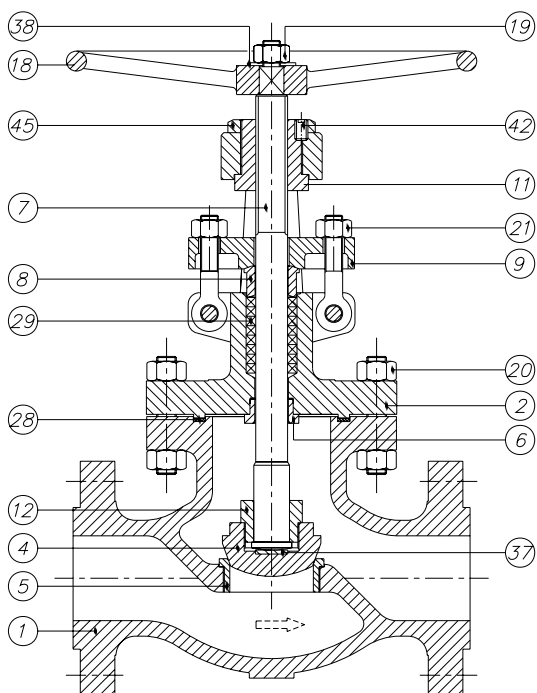
Design:
BS 1873 and ASME B16.34



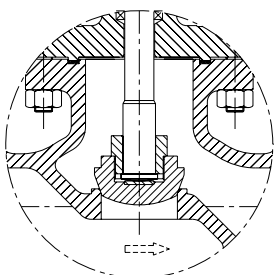
JC[®] Globe Valves Class 600

Type Bolted Bonnet

Parts and materials



**Stainless
Steel
Construction**



Trim Material

API 600 Trim No.	Nominal Trim	Stem / Backseat (1)	Seating Surface Body / Wedge
1	F6	13Cr	13Cr
2	304	18Cr-8Ni	18Cr-8Ni
3	F310	25Cr-20Ni	25Cr-20Ni
4	Hard F6	13Cr	Hard 13Cr
5	Hardfaced	13Cr	Co-Cr A (2)
5A	Hardfaced	13Cr	Ni-Cr
6	F6 and Cu-Ni	13Cr	13Cr and Cu-Ni
7	F6 and Hard F6	13Cr	13Cr and Hard 13Cr
8	F6 and Hardfaced	13Cr	13Cr and Co-Cr A (2)
8A	F6 and Hardfaced	13Cr	13Cr and Ni-Cr
9	Monel	Ni-Cu Alloy	Ni-Cu Alloy
10	316	18Cr-8Ni-Mo	18Cr-8Ni-Mo
11	Monel and Hardfaced	Ni-Cu Alloy	Ni-Cu Alloy and Trim 5 or 5A
12	316 and Hardfaced	18Cr-8Ni-Mo	18Cr-8Ni-Mo and Trim 5 or 5A
13	Alloy 20	19Cr-29Ni	19Cr-29Ni
14	Alloy 20 and Hardfaced	19Cr-29Ni	19Cr-29Ni and Trim 5 or 5A
15	Hardfaced	18Cr-8Ni	Co-Cr A (2)
16	Hardfaced	18Cr-8Ni-Mo	Co-Cr A (2)
17	Hardfaced	18Cr-10Ni-Cb	Co-Cr A (2)
18	Hardfaced	19Cr-29Ni	Co-Cr A (2)

(1) ...and small internal parts that normally contact the service fluid

(2) Trademark material Stellite 6

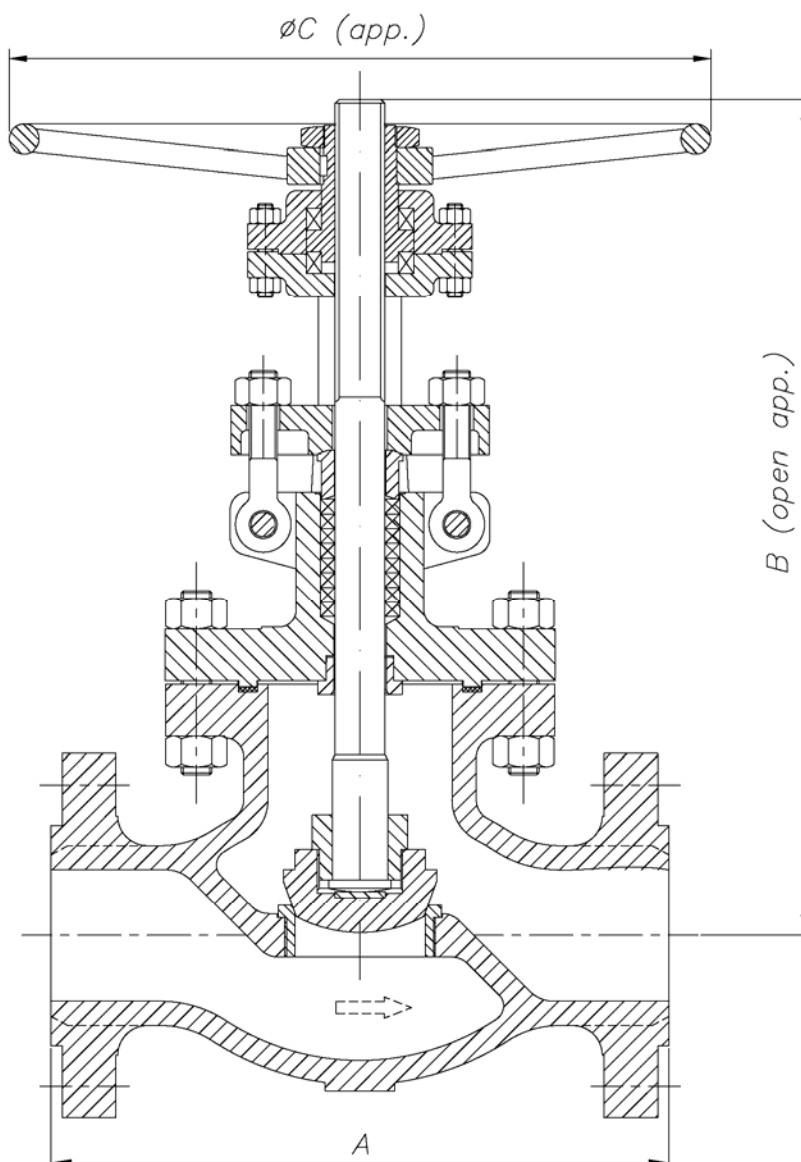
Item	Description	Material of construction*			
		Carbon Steel	Carbon Steel (Low Temp.)	Alloy Steel	Stainless Steel
1	Body	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
2	Bonnet	A 216 Gr.WCB	A 352 Gr.LCB	A 217 Gr.C5	A 351 Gr.CF8M
4	Disc	A105 + ER 410	A 182 Gr.F304	A 217 Gr.C5 + ER 410	A 351 Gr.CF8M
5	Seat Ring	A105 + Stellite	A 182 Gr.F304	A182 Gr.F6a + Stellite	-----
6	Backseat	A182 Gr.F6a	A 182 Gr.F304	A182 Gr.F6a	-----
7	Stem	A182 Gr.F6a	A 182 Gr.F304	A182 Gr.F6a	A 182 Gr.F316
8	Gland	A 105	A 105	A182 Gr. F6a	A 182 Gr.F316
9	Gland Flange	A 105	A 105	A 105	A 182 Gr.F304
11	Stem Nut	B 148 / A 439 Gr.D2	B 148 / A 439 Gr.D2	B 148 / A 439 Gr.D2	B 148 / A 439 Gr.D2
12	Disc Nut	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
18	Handwheel	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
19	Handwheel Nut	Steel	Steel	Steel	Steel
20	Bonnet Bolt & Nut	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H(3)
21	Eye Bolt & Nut	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H	A 193 Gr.B7 / A 194 Gr.2H
28	Gasket	SPW S.S. 304 / Graphite	SPW S.S. 304 / Graphite	SPW S.S. 304 / Graphite	SPW S.S. 316 / Graphite
29	Stem Packing	Graphite	Graphite	Graphite	Graphite
37	Thrust Washer	A 182 Gr.F6a	A 182 Gr.F304	A 182 Gr.F6a	A 182 Gr.F316
42	Washer	Steel	Steel	Steel	Steel
45	Lock Nut	A 193 Gr.B7	A 193 Gr.B7	A 193 Gr.B7	A 193 Gr.B7
		Steel	Steel	A 182 Gr.F6a	A 182 Gr.F316

(3) Zinc coating

* Standard constructions with Trim 8, 2 and 10, other options are available



Globe Valves Class 600 **Type Bolted Bonnet** **Dimensions**



DN	A (RF/BW)	B	ØC	WEIGHT
50 (2")	292	425	250	35
65 (2½")	330	502	300	48
80 (3")	356	521	350	73
100 (4")	432	620	450	117
125 (5")	508	756	500	245
150 (6")	559	886	560	327
200 (8")	660	932	460	482
250 (10")	787	1040	610	700
300 (12")	838	1280	760	900

(*) Dimensions in mm and weight in kg
 For other sizes consult to the technical department.



® Globe Valves Class 600

Type Bolted Bonnet

General Characteristics, Cv, P&T Rating

GENERAL CHARACTERISTICS	Fig. VG600BB			
DESIGN STANDARDS				
Valves design	BS 1873	ASME B16.34		
End to End Dimensions	ASME B16.10 & ISO 5752			
Flanged Dimensions	ASME B16.5 & ISO 7005-1 Part. 1	BS 3293	MSS SP-44	
Buttweld Dimensions	ASME B16.25			
Visual Inspection	MSS SP- 55			
Marking	MSS SP-25 & ISO 5209			
TESTS AND CERTIFICATES				
Pressure testing	API 598 & ISO 5208	EN 12266-1	MSS SP-61	
Other	ATEX, CE			

Cv Values in U.S. Gallons/min.

DN	Cv	DN	Cv
50 (2")	55	150 (6")	425
65 (2½")	80	200 (8")	790
80 (3")	105	250 (10")	1200
100 (4")	190	300 (12")	1850
125 (5")	305		

Pressure-Temperature (STANDARD CLASS According to ASME B16.34)

Temp °C	MATERIAL			
	A216 WCB Bar	A352 LCB Bar	A217 C5 Bar	A351 CF8M (**) Bar
-29 to 38	102,0	95,8	103,4	99,2
95	93,0	90,6	102,7	85,4
150	90,6	87,8	98,5	77,2
205	87,5	85,1	87,1	70,6
260	82,7	80,3	91,6	65,8
315	75,4	73,4	83,4	62,0
345	74,1	72,0	81,0	61,3
375	73,4		78,2	59,9
400	69,6		72,7	58,9
425	56,8		69,9	58,2
450	36,9		66,5	57,5
485	23,8		51,0	57,2
510	14,1		37,9	53,4
540	7,2		27,6	48,2
565			20,0 *	47,2 *
595			13,8 *	42,0 *
620			8,6 *	32,7 *
650			4,8 *	25,5 *
675				20,3 *
705				16,2 *
735				13,1 *
760				10,3 *
790				7,9 *
815				5,9 *

* FOR WELD END VALVES ONLY. FLANGE END RATINGS TERMINATE AT 540°C

** A351 CF8M at temperatures over 538°C (1000°F) to be used only if Carbon contents is 0,04% or higher.